M/027/007

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
FILLMORE FIELD OFFICE
35 East 500 North
Fillmore, UT 84631
http://enbb.blm.interwebdesign.com

IN REPLY REFER TO:
3809
(UT-010)
UTU-072862

September 10, 1999

JAMES ASHTON
WESTERN STATES MINERALS CORPORATION
250 SOUTH ROCK BLVD.
RENO NV 89502

WAYNE HEDBERG
PERMIT SUPERVISOR
UTAH DIVISION OF OIL, GAS AND MINING
1594 W NORTH TEMPLE STE 1210
SALT LAKE CITY UT 84114-5801

Dear Mr. Ashton and Mr. Hedberg:

A copy of the Finding of No Significant Impact/Decision Record and the Environmental Assessment for the Drum Mine Reclamation Plan is enclosed.

Ron Teseneer will be out of the office until October 1, 1999. If you have any questions before then, please contact Sheri Wysong at 435-743-3124.

Sincerely,

Rex Rowley

Rex Rowley
Field Manager

Enclosure: FONSI/Decision Record and EA for the Drum Mine Reclamation (23 p.)

FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD

WESTERN STATES MINERALS CORPORATION
FOR RECLAMATION OF THE DRUM MINE

EA NO. J-010-099-074 EA

UTU-072862

Finding of No Significant Impact

Based on the analysis of Environmental Assessment (No. J-010-099-074 EA), I have determined that the action will not have a significant effect on the human environment, and therefore, an environmental impact statement will not be prepared.

Decision

It is my decision to authorize Western States Minerals Corporation to conduct reclamation on the Drum mine site, as described in the proposed action alternative of EA NO. J-010-099-074 EA. This decision is in full force and effect as provided for in 43 CFR §3809.4(b).

This decision is contingent on meeting all stipulations and monitoring requirements listed below.

Stipulations

1. All earthmoving equipment operating in areas of known knapweed infestation shall have their undercarriages washed down prior to moving to uninfested areas. All earthmoving equipment shall have their undercarriages washed down prior to being removed from the site.

2. The operator shall avoid a cave located near waste dump 7.

3. The operator shall not injure, alter, destroy, or collect any site, structure, object, or other value of historical, archaeological, paleontological, or other cultural importance. The operator shall immediately bring to the attention of the BLM any and all antiquities or other values of cultural or scientific interest, including but not limited to historic and prehistoric ruins, fossils and artifacts, discovered as a result of operations under this reclamation plan, and shall leave such discoveries intact until told to proceed by the BLM. The BLM shall evaluate the discoveries brought to its attention and shall determine, in five (5) working days, what action shall be undertaken prior to authorizing allowing operations


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that might be destructive to the discovery.

4. All Federal, State, and local laws and regulations pertaining to the storage, use, and disposal of hazardous materials shall be followed.

   The operator is required to contact the Department of Environmental Quality (DEQ), Emergency Response Section (ERS) at the Section's 24-hour response number (801-536-4123) immediately of a spill or discharge of hazardous substances.

5. No waste oil or other petroleum products shall be disposed of on the project area. All waste oil shall be properly contained and removed to an authorized waste oil disposal site. If any petroleum products are spilled, the operator must immediately contain the spill, remove and dispose of the substance spilled and all contaminated soil in an authorized disposal site.

6. Human waste shall be contained in a chemical toilet that is approved by the appropriate state or county official. A copy of the permit shall be filed with the Authorized Officer.

Monitoring

Monitoring of the site, after reclamation work is completed, for revegetation success shall be conducted as specified by BLM policy.

Rationale

The proposed action alternative is in conformance with the House Range Resource Area Resource Management Plan, under the section on locatable minerals on page 77. Additionally, any of the other possible alternatives would result in a violation of Federal statute and/or regulation.

Reviewed:

Fillmore Environmental Coordinator — Date: 9/9/99

Approved:

Field Manager — Date: 9-10-99

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
FILLMORE FIELD OFFICE
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Fillmore, UT 84631
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ENVIRONMENTAL ASSESSMENT

J-010-099-074 EA

WESTERN STATES MINERALS CORPORATION
4975 VAN GORDON ST.
WHEAT RIDGE, COLORADO

DRUM MINE RECLAMATION
UTU-072862

T. 15 S., R. 10 W., SLM
MILLARD COUNTY, UTAH

Prepared by
Ron Teseneer

September 9, 1999

CHAPTER I

INTRODUCTION/PURPOSE AND NEED

a. Introduction

The Drum Mine was a conventional gold heap leach operation. It was operated by Western States Minerals Corporation (WSMC) from 1984 until October 1988 when it was sold to Jumbo Mining Company (Jumbo). Jumbo operated the mine until 1990 and declared bankruptcy November 10, 1997.

There was a partial state permit transfer from WSMC to Jumbo at that time. Jumbo also assumed WSMC's Plan of Operations (Plan), including the reclamation responsibilities of WSMC under the approved Plan, at that time. Disturbances at the mine included pits, heaps, dumps, ponds, the plant site, access roads, and drill pads and sites. Not all of these disturbances were included in WSMC's Plan, hence the reclamation liability for them remained with WSMC.

A total 255 acres need to be reclaimed. This excludes some of the outlying exploration areas. Of this total, WSMC is responsible for reclaiming 103 acres, and Jumbo has the reclamation responsibility for 108 acres, including the Alto haul road. The Bureau of Land Management (BLM) and the Utah Division of Oil, Gas and Mining (UDOGM) have seized Jumbo's reclamation bond to enable them to conduct reclamation of Jumbo's share of the reclamation. An additional 44 acres would be disturbed during reclamation. This area would be used as a source for topsoil to reclaim the heaps and dumps.

b. Purpose and Need

The regulations at 43 CFR §3809.1-1 state that "[a]ll operations ... shall be reclaimed as required in this title." In addition, the Section 302(b) of the Federal Land Policy and Management Act of 1976 (FLPMA) requires the Secretary to "take any action necessary to prevent unnecessary or undue degradation of the lands." Failure to reclaim the Drum Mine in a timely manner would be a violation of Section 302(b) of FLPMA.

The proposed activity is designed to satisfy these regulatory and statutory requirements and the requirements of the other applicable regulations and statutes. The goals of the proposed activity are:

- Ensure public safety, reduce or eliminate adverse impacts, and minimize unsightly visual impacts.
- Minimize off-site impacts by controlling deleterious infiltration, erosion, sedimentation, and related

degradation of existing drainages.

- Return the disturbed areas to a stabilized condition similar to that which existed prior to mining activities.

- Re-establish a stable environment that will support a diverse self-sustaining vegetative and wildlife habitat, consistent with accepted land use objectives.

- Achieve a visual compatibility with the surrounding landscape.

The Drum mine is a non-operating open pit, heap leach gold mine with all of the safety and environmental problems associated with such operations.

The Drum mine consists of two open pits, one of which had an underground operation based on the pit floor; three low grade heaps, seven high grade heaps (two of which were merged into one); five waste dumps; pregnant and barren ponds; a mill building; and other facilities and equipment.

The open pits are largely unbermed and represent a significant safety hazard, as do the open underground facilities in the SW EX pit (see attachment 1). The heaps and waste dump sides are too steep and they need to be regraded to a stable configuration. The ponds collect and retain some water and, additionally, contain some sludge from the process waters. The building and facilities have no further use on the public lands and may contain some safety hazards. These conditions need to be corrected, and that is the purpose of the proposed action.

c. Issues

Minerals - The initial discussion of the reclamation process included encapsulating the pond sludge in the pond liners. An unknown third party removed significant amounts of the liner material, leaving an insufficient amount to encapsulate the sludge.

Range - There are oil spills, drums of oil and/or water, and pits along the water pipeline that need to be cleaned up.

Recreation/Wilderness - There is a cave near waste Dump 7 that must be avoided.

Noxious Weeds - Squarrose knapweed occurs in the general area.

d. Land Use Plan Conformance Statement

The proposed action and alternative described below are in

conformance with the House Range Resource Management Plan, dated October 1987, management decisions pertaining to locatable minerals (page 77), and are consistent with Federal, State, and local laws, regulations, and plans to the maximum extent possible.

CHAPTER II

PROPOSED ACTION AND ALTERNATIVES

a. Proposed Action

The proposed action is a compromise between the ideal reclamation of the Drum Mine and the available funds for completing Jumbo's portion of the reclamation. As covered in the reclamation agreement between WSMC, UDOGM, and BLM, WSMC will use the available funds from UDOGM and BLM and complete final reclamation on the Drum mine. Reclamation operations would commence upon approval of the reclamation plan, signing of the settlement agreement between the interested parties, and when weather conditions allow. Some variances from Utah standards would be granted. The proposed action is summarized below. See Attachment 1 for a map of the site.

Disturbed areas within the project boundary, except the SW EX Pit and the NR Pit, would be reclaimed by regrading, applying growth media (top soil), fertilization (using manure or other bio-solids), and seeding. Surface drainage would be reestablished throughout the area. A variance request from the open pit reclamation requirement of Utah regulation R647-4-111.7 would be granted by UDOGM.

If the appropriate documents are signed and approvals obtained, reclamation may start as early as the end of September 1999.

Facilities:

All remaining buildings and facilities would be dismantled and disposed of appropriately. Concrete foundations would be broken up and placed either in the mine waste dump and buried, or buried in place.

Any solution remaining in the process water ponds would be sprayed on the roads during mine reclamation for dust control. The sediment in the ponds would be covered with bentonite clay and then covered with fill material prior to the placement of soil and seeding.

All haul roads (including the center portion of the Alto haul road) would be reclaimed by regrading, ripping

compacted surfaces, replacing growth medium and seeding the area. All roads would be reclaimed. In addition, the Alto haul road would be blocked near each end to prohibit access.

After removal of the facilities, the plant site would be regraded to re-establish a suitable drainage pattern.

The existing fence would remain until reclamation and revegetation have been determined to be successful, as determined by the BLM and UDOGM. Some additional fence would have to be constructed to cover gaps in the existing fence. The fence would be maintained and posted throughout the revegetation monitoring period.

Material from the bottom of the SW EX pit would be pushed into openings of any underground workings exposed in the SW EX pit (see Attachment 1) to block access to the underground workings. Some material from one of the waste dumps may need to be trucked into the pit to provide sufficient material to adequately block the openings.

The BLM has assumed the responsibility for the project water well and the radio telephone site which are located outside of the Drum mine perimeter.

Regrading and Recontouring:

The final slope angle for the heap leach pads and the waste rock dumps would be 3:1 (H:V) whenever feasible. Steeper slopes would be negotiated whenever not feasible. A bulldozer would be the primary tool used achieving the desired slopes. Disturbed areas that do not require recontouring would be scarified in preparation for placement of growth medium.

All available soil would be removed from those areas to be covered during regrading of the heap leach pads and waste rock dumps. The soil removed would be either stockpiled for later use or placed directly on top of already recontoured areas.

Growth Medium Replacement:

Approximately six inches of suitable growth medium (soil) would be placed on top of all disturbed areas where no soil currently exists. The soil would be spread using a bulldozer. All spreading operations would be conducted on the contour to minimize erosion.

The currently stockpiled soil is insufficient to cover the disturbed areas. An area of approximately 44 acres would need to be disturbed to supply the additional soil needed.

Not all of the soil would be removed from the soil borrow area. Sufficient soil would be left to support plant growth.

Revegetation and Stabilization:

Bio-solids (manure) would be applied to the areas to be revegetated to enhance the soil fertility. The final finished seedbed would be "dimpled", thus minimizing erosion, optimizing available soil moisture, and producing a surface appropriate for broadcast seeding. Seedbed preparation would occur just prior seeding to provide the highest probability for successful germination. The proposed seed mix is:

Species	Variety	lb/Acre (pure live seed)
Crested Wheatgrass	Hycrest	2.0
Immigrant Kochia	Immigrant	0.5
Alfalfa	Ladak	1.0
Fourwing Saltbush	Native	2.0
Wyoming Big Sagebrush	-	0.1
Indian Ricegrass	Paloma	3.0
Intermediate Wheatgrass	Luna	2.0
Western Wheatgrass	Rosanna	2.0
Yellow Sweet Clover	-	0.5

Hazardous Materials:

Any hazardous materials found would be disposed of off site at an appropriate disposal facility. Hydrocarbon contaminated soils would be placed on waste dump W1 for evaporation and naturally occurring bio-remediation. (See Attachment 1.)

Drum Mine Site Exploration Related Disturbances:

Any open drill holes within the project boundary and all monitoring and observation wells would be plugged pursuant to Utah regulation R647-4-108.

Outlying and Marginally Related Disturbances and Exploration Activities:

WSMC constructed a drill pad and drilled a hole near Busby Spring and would reclaim this disturbance and unplugged drill hole, and any other disturbances conducted under notices UT-057-39N, UT-056-64N, UT-056-062N, and unserialized notices submitted December 13, 1983 and February 1, 1985. Reclamation of these areas is to be conducted under the appropriate notice.

The Mizpah area would be jointly reclaimed by WSMC, BLM, and UDOGM. The area consists of unplugged drill holes and unreclaimed access roads. The Mizpah area encompasses about five acres, not all of which is disturbed. Reclamation shall consist of plugging all open drill holes to the standard of Utah regulation R647-4-108 and recontouring and revegetating some access roads. Some of the access roads have naturally revegetated. The same seed mix would be used as is used for revegetation within the project area perimeter.

The Alto pit, which is located on patented mining claims and was operated under a state mining permit, would be reclaimed to UDOGM standards at the same time that the Drum Mine is reclaimed.

Drums containing waste oil at the pumping stations and the well site would be removed for appropriate disposal. Hydrocarbon contaminated soil at these sites would be placed on waste dump W1 for evaporation and naturally occurring bio-remediation.

b. Alternatives Considered but not Analyzed

No Action Alternative - Under this alternative, no reclamation would be conducted at the Drum mine. This alternative was not analyzed because it violates Federal, State, and local laws and regulations.

Alternative A - Partial reclamation. Under this alternative, WSMC would be required to conduct reclamation to the full standard spelled out in the state of Utah statues and regulations, with no variances, for those areas of the Drum mine for which they retain reclamation liability. The BLM and UDOGM would conduct reclamation on those portions of the Drum mine for which Jumbo has reclamation liability, to the extent possible with the available funds (Jumbo's forfeited bond). This would entail taking care of the worst safety and environmental problems and delaying full, final reclamation until sufficient funds were appropriated. There is a distinct possibility that full, final reclamation would never be completed. This alternative was not analyzed because, as in the No Action Alternative, unless

appropriation of sufficient funds can be guaranteed, it violates Federal, State, and local laws and regulations.

CHAPTER III

AFFECTED ENVIRONMENT

General Setting

The Drum mine is located near the southern end of the Drum Mountains. The Drum Mountains are a horst in the Basin and Range Extensional Province. The rocks within the Drum Mountains consist of Cambrian marine sediments that have been metamorphosed by Tertiary felsic igneous intrusive rocks.

Soils within the Drum mountains are sparse to non-existent on the ridge tops and sides and are of varying thickness in the valleys. Much of the grounds surface is either rock outcrop or desert pavement.

The vegetation in the vicinity of the Drum Mine may best be described as salt desert shrubs. There are some juniper at higher altitudes and in the dry washes. Salt cedar has invaded the area around Busby Spring, and there is some yucca in the wash above Busby Spring.

Antelope was the only large animal observed during a full summers field work in the area. Badger, jack rabbits, and kangaroo rats were also observed in the area.

Critical Elements of the Human Environment

There are thirteen critical elements of the human environment that are specifically required by statute, regulation, or executive order that must be considered in the proposed action and alternatives. They are:

Air Quality
Areas of Critical Environmental Concern
Cultural Resources
Farm Lands (prime or unique)
Floodplains
Native American Religious Concerns
Paleontology
Threatened, Endangered or Candidate Species
Wastes (hazardous or solid)
Water Quality (drinking or ground)
Wetlands/Riparian Zones
Wild and Scenic Rivers
Wilderness

Negative Declaration

The following critical elements of the human environment are not present or are not affected by the proposed action or alternatives in this EA (see the Interdisciplinary Team Checklist, (Attachment 2):

Areas of Critical Environmental Concern
Cultural Resources
Farm Lands (prime or unique)
Floodplains
Native American Religious Concerns
Paleontology
Threatened, Endangered or Candidate Species
Water Quality (drinking or ground)
Wetlands/Riparian Zones
Wild and Scenic Rivers
Wilderness

a. Proposed Action

Resources Present and Brought Forward for Analysis

Air Quality

The air quality in the vicinity of the Drum Mine is generally good, although on windy days there will be some particulate matter (dust) in the air that is picked up by the wind in the valley bottoms and blown into the area. There is also a contribution to the particulate matter in the air due to fugitive dust emissions from vehicle traffic in the area.

Wastes (hazardous or solid)

There are currently several areas of hydrocarbon contaminated soil in the mine area and along the water pipeline route. Additionally, there are several barrels of waste oil, waste oil and/or water and/or sludge on the site to be reclaimed.

There is considerable solid waste on the site at this time. The solid waste is in one of three categories: 1) PVC pipe used to apply the leach solution to the leach heaps; 2) the facilities or waste from demolition of the facilities; and 3) scrap and debris from the mining operation, including approximately 75 used rubber tires for large earthmoving equipment.

Water Quality (drinking or ground)

The waste dumps, leach heaps, process water from the ponds and the sediment in the bottom of the

process water ponds were sampled during a testing program during the fall of 1998. The Utah Division of Water Quality has determined that the results of the analysis indicate that there is little danger of degradation of water quality from any of these features.

Noxious Weeds

Squarrose knapweed is known to be present in the Drum Mountains.

b. Alternatives - No alternatives were analyzed.

CHAPTER IV

ENVIRONMENTAL CONSEQUENCES

a. Proposed Action

Air Quality

There would be a slight degradation of air quality during reclamation. There would be a contribution to the particulate matter in the air due to fugitive dust emissions from the equipment conducting earthmoving operations and from vehicles traveling to and from the site.

After reclamation and revegetation is complete, there should be a net decrease in particulate matter in the air because there would be fewer unvegetated areas for the wind to pick up dust from.

Soils

There would be a net loss of undisturbed soil due to reclamation. Recontouring the waste dumps and leach pads would cover some previously undisturbed areas.

In addition, some soil would have to be removed from an undisturbed area to have sufficient soil to cover the waste dumps and leach pads to a sufficient depth to support plant growth. Sufficient soil would be left in the borrow areas to support plant growth, so there would be no net loss of plant growth in these areas.

The soil from the areas to be covered during recontouring operations and that from the borrow areas would be used to cover the waste dumps and leach pads to enable them to support plant growth. This would

result in a net gain in total area capable of supporting plant growth.

Wastes (hazardous or solid)

The hydrocarbon contaminated soils would be placed on waste dump W1 where evaporation and bioremediation would gradually reduce the amount of hydrocarbons in the soils. All barrels containing waste oil and sludge with be removed for recycling or disposed of in an approved facility.

All solid waste would be disposed of in an approved manner. Those materials that could salvaged would be offered to a salvage yard. The unsalvageable material that can legally be buried on site would be burred during the recontouring phase of the operation. Those materials that require disposal at an approved site would be removed to such a location.

Water Quality (drinking or ground)

There would be no degradation of water quality unless there is a significant precipitation event which occurs prior to revegetating the area.

Noxious Weeds

There would be the possibility for the spread of squarrose knapweed and other noxious weeds during reclamation.

b. Alternatives - No alternatives were analyzed.

c. Mitigating Measures

Air Quality - The roads on the mine site would be sprayed with water from the process water ponds. Due to the limited nature of the operation and the lack of impact to surrounding areas, no further dust control measures would be used.

Noxious weeds - All earthmoving equipment operating in areas of known knapweed infestation would have their undercarriages washed down prior to moving to uninfested areas. All earthmoving equipment would have their undercarriages washed down prior to being removed from the site.

d. Residual Impacts

There would be short term residual impacts to the site after

reclamation work is completed.

Air Quality - Until revegetation is complete, there would be more opportunity for the wind to pick up dust from the disturbed areas which would result in an increase in particulate matter. In the long term, air quality would improve above the current lever. The vegetation established on the waste dumps, heap leach pads, and roads would reduce the opportunity for the wind to pick up dust from the these areas.

Waste - Potential contamination of surface or ground water from solid or hazardous waste would no longer exist once reclamation is complete.

Water Quality - There would be a potential for increased sediment load in surface waters if a significant precipitation event occurs during or shortly after reclamation. Once the vegetation has been reestablished, even a significant precipitation event should result in a lesser sediment load.

Noxious Weeds - Revegetation of the site with desirable species would reduce the opportunity for noxious weeds to invade the disturbed areas.

e. Cumulative Impact Analysis

The Drum Mountains have been mined extensively for about 100 years. Much of the mining occurred prior the implementation of the Surface Management regulations, and numerous unreclaimed mining operations dot the landscape. The Drum mine was the largest single operation to occur in the Drum Mountains, and may equal half of the total disturbed acreage within the mountain range. Reclamation of this site would greatly reduce the number of undisturbed acres within the Drum Mountains and reduce the potential for further degradation of the environment.

f. Monitoring

The BLM would continue to monitor the reclaimed areas as determined by BLM policy. Once the BLM and UDOGM have determined that satisfactory revegetation has occurred, the monitoring program would cease.

CHAPTER V

CONSULTATION AND COORDINATION

a. List of Preparers

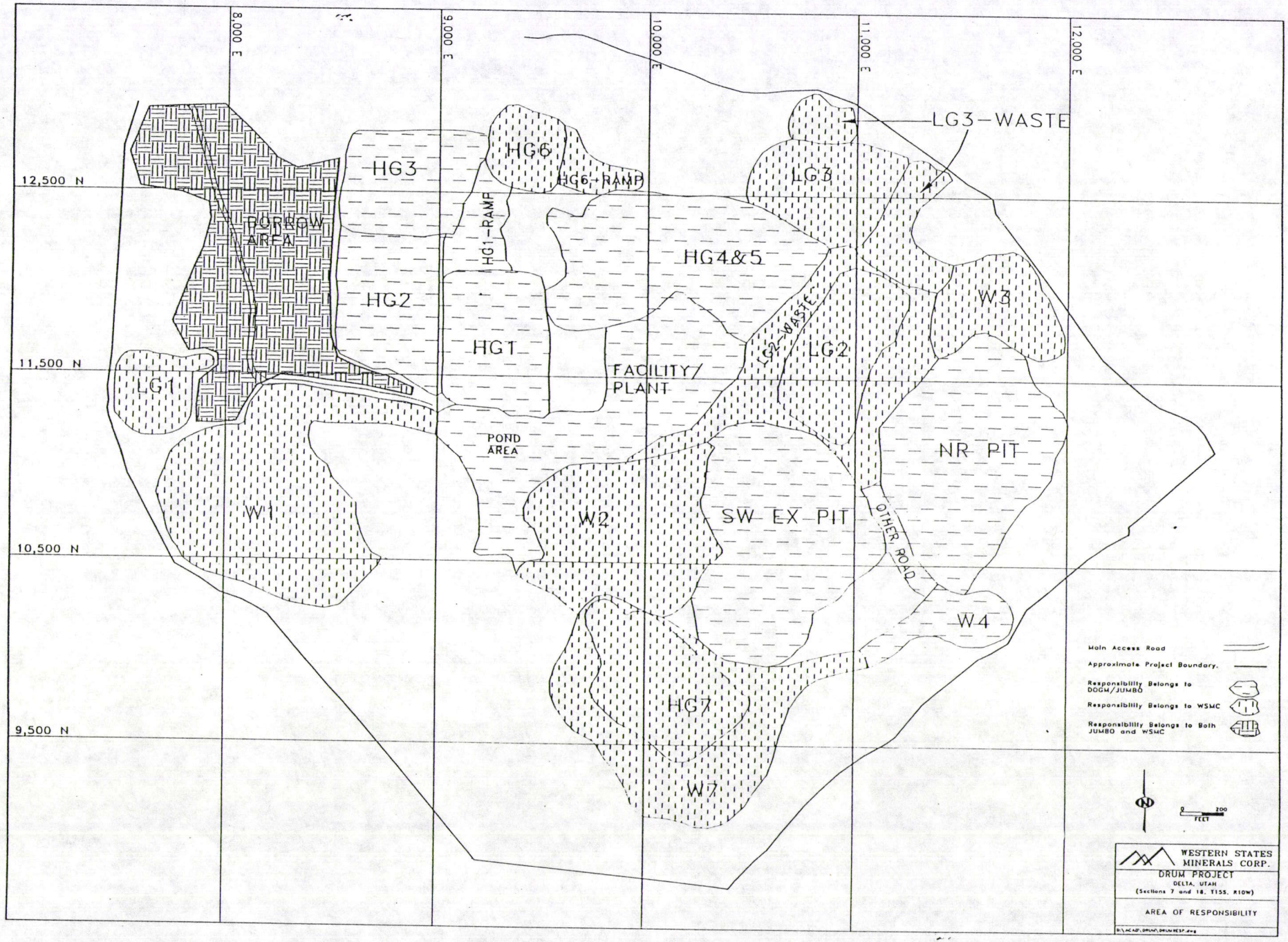
See the cover page.

b. Persons, Groups or Agencies Consulted

Utah Division of Oil, Gas and Mining
Utah Division of Water Quality

c. Statement of Public Interest

On August 6, 1999, the proposed action was placed on the Environmental Notification Bulletin Board and no public comment or inquiry has been received concerning the proposed action being analyzed in this Environmental Assessment.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HG6
HG6-RAMP
HG3
HG1-RAMP
LG3
PORTAL AREA
HG4&5
W3
HG2
HG1
LG2-WASTE
LG2
FACILITY/ PLANT
LG1
POND AREA
NR PIT
W1
W2
SW EX PIT
OTHER ROAD
W4
HG7
W7
Main Access Road
Approximate Project Boundary.
Responsibility Belongs to DOGM/JUMBO
Responsibility Belongs to WSMC
Responsibility Belongs to Both JUMBO and WSMC
0
200
FEET
WESTERN STATES MINERALS CORP.
DRUM PROJECT
DELTA, UTAH
(Sections 7 and 18, T15S, R10W)
AREA OF RESPONSIBILITY

INTERDISCIPLINARY TEAM CHECKLIST

PROPOSED ACTION: Drum Mine Reclamation

TEAM LEADER: Ron Teseneer

DATE: December 14, 1998

Identify the important impacts created by the proposed action on your assigned resources. Also check the list below for critical elements.

CRITICAL ELEMENTS	AFFECTED yes	AFFECTED no	INITIAL
Air Quality		✓	RC
ACECs		✓	✓
Cultural Resources		✓	EK
Farmlands, Prime/Unique		✓	PC
Floodplains		✓	PC
Nat. Amer. Rel. Concerns		✓	ESR
T & E & S Plants		✓	MM
T & E & S Animals		✓	NO ERL
Wastes, Hazardous/Solid		✓	ERL
Water Quality		✓	RC
Wetlands/Riparian Zones		✓	MM
Wild Horse and Burro		✓	GB
Wild & Scenic Rivers		✓	✓
Wilderness		✓	✓
Noxious Weeds		✓	PAF

Short Description of Impacts:

R. Tesener: Minerals liner for process water ponds has largely been removed, not enough to encapsulate the sludge RonTes 12/14/98

N. DeMille: Lands No conflict w/lands program - Coordinate w/ prior existing right holders + non federal land owners, 12/99

H. Gates: Range Many of the sites, Pump Stations, well sites, mine area Roads + fuel, safety fuels, oil drums, spilled oil, dead pits, etc a debree needs to be cleaned up + pits leveled - HDGates 1/15/99

B. Crosland: Forestry No Conflict with Forestry. This plan should be reviewed by Stan Adams in Richfield/Hay MAT Coordinator. 1-21-98

M. Mendenhall: TES Plants No conflict mjm 2/2/99

L. Fergus: Recreation, Wilderness, (VRM) There is a cave located in Sec W7 That Needs To be avoided — NO Fill or Grading of any Kind 12/14/98

M. Pierce: Wildlife/TES Animals No conflict - No clearance needed due to reclamation of previously disturbed areas.

~~M. Mendenhall~~/M. Pierce: Riparian No conflict 15 Jan 99

G. Bennett: Wild Horse And Burro No Conflict with wild horses in this area 1/20/99 Gale Bennett

E. Kreusch: Cultural Resources/Paleontology no conflict w/cultural 2/1/99

P. Caso: Watershed No conflict DCaso 1-20-99

H. Gates: Water Rights We would like to have the Water Rights on the Well + maybe work with Spring HDG 1/15/99

P. Fosse: Noxious Weeds/Assist. A. M. Squarrose knapweed occurs in this general area. Vigilant detection is recommended for the disturbed/reclaimed areas. If noxious weeds infest the reclaimed area, applicant should be responsible to control them to BLM's satisfaction. PAF 1/19/99

THREATENED ENDANGERED AND SENSITIVE ANIMAL SPECIES

Date: September 3, 1999 Examiner: Mark Pierce

Project Name Drum Mine

Project Location T.15. R. 10 W. Section(s) various

Elevation: 6100 Feet Geology :Desert Floor

Vegetative Type Desert Shrub

Description of Field Work None

Reference Sources House Range ROD October 1987-WSRA ROD April 1987

General Comments The project will not adversely impact T&E or Sensitive species in the area

Threatened, Endangered or Sensitive Species: Yes_____ No X
(List if Yes)

Species Collected on Site

Species Observed on Site

Potential Impacts on Species From the Project None

Signature of Inspector

Threatened, Endangered & Sensitive Plant Clearance
Fillmore Field Office

DATE: February 2, 1999 **EXAMINER:** Melanie Mendenhall

PROJECT NAME: *Drum Mine Reclaimation*

PROJECT LOCATION: T. 15 S., R. 10 W., Sec.5, 6, 7, 8, 17, 18, 19

ELEVATION: various **GEOLOGY:**

RESOURCE AREA: Fillmore Field Office **VEGETATIVE TYPE:**

Description of Field Work: Literature search of the Fillmore BLM library and Richfield Field Office information.

Reference Sources:
-Utah's Rare Plants Revisited (Great Basin Naturalist Vol.45, No.2)
-Plants From Millard County (BYU 1980)
-MX Final Report 1980
-1991 Habitat Survey, House Range R.A.
-1991 Habitat Survey, Warm Springs R.A.
-others

General Comments:
The information available indicates that no threatened, endangered or sensitive plant species have been located in the proposed project area. Most of the area has been previously disturbed.

If any Special Status plant species are discovered during construction activities or the project life which may be affected or disturbed, all activities that may affect this resource will cease and notification will be made to the T&E specialist in the field office.

Threatened, Endangered, or Sensitive Plants Yes___ No_X_

(List if Yes):_____

***Plants Collected on Site:**

***Plants Observed on Site:**

*Plant Abundance
(a - abundant)
(c - common)
(i - infrequent)

Melanie Mendenhall

Summary Report of Cultural Resources Inspection

Department of the Interior
Bureau of Land Management
Richfield District, Fillmore Office

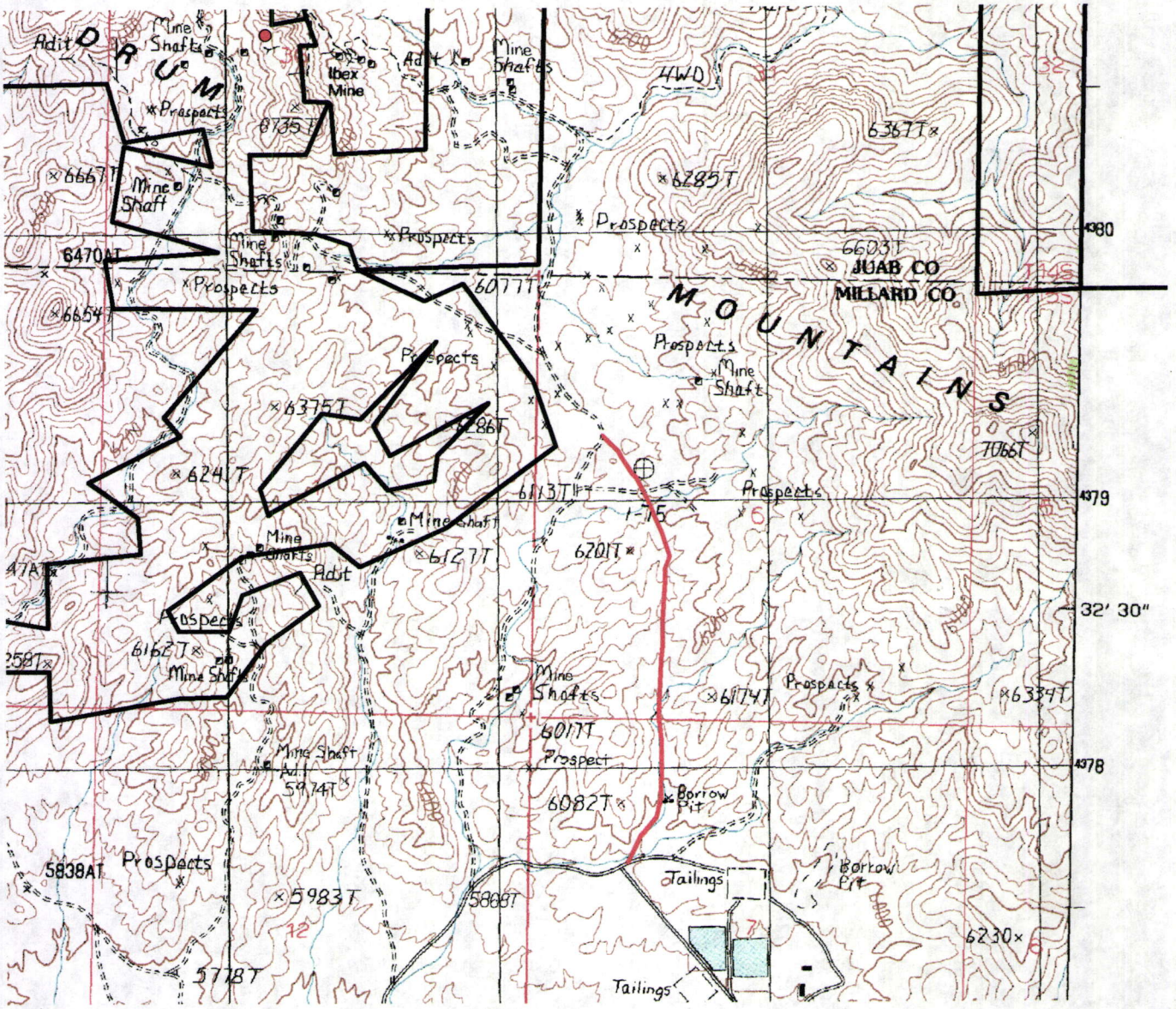
State Project #: _____

1. Report Title: Drum Mine Reclamation
2. Development Company: BLM/ DOMG/ Western States Minerals
3. Report Date: 2/01/99
4. Date of Survey:1/22/99
5. BLM Resource Area: Warm Springs Resource Area
6. County: Millard
7. Fieldwork Location: Site is located approximately 28 miles west northwest of Delta, Utah in the Drum Mountains
Map: Lady Laird Peak, Utah 7.5' 1988
Legal Description: T 15S, R 10W, Sec 7
8. Project Description: The proposal is the removal of topsoils from area shown on map to cover tailings piles.
9. Project Area Description: Vegetation consists of kochia, rabbitbrush, ephedra, and cheat grass. The area is heavily disturbed by previous mining activities. The soils area yellow to grey to tan silts with a few diorite outcrops present.
10. Description of Examination Procedures: The entire borrow area was surveyed utilizing 10m pedestrian transects.
11. Inventory Type: Intensive (Class III)
12. Legally Definable Acres Surveyed: 15 acres
13. Number of Sites Found: 0
14. Collection: N/A
15. Description of Findings: None
16. Actual/Potential National Register Properties Affected: 0
17. Literature Search, by Whom/Where/Date: Erik Kreusch - BLM Fillmore -1/21/99
18. Conclusion/Recommendations: No Historic Properties were identified in the surveyed area. Therefore, it is the determination of the BLM, that, the project proceed as planned.
19. Field Supervisor: Erik Kreusch
20. Principal Investigator: _____
Erik Kreusch, Archaeologist
(Warm Springs/House Range Resource Areas)

BLM, USO Form 8100-3
Division of State History Form

M/027/007
Received from BLM 9/8/99

Alto Road and Site



0.7 0 0.7 1.4 Miles

N
W E
S

Altoroad.shp
Alto.shp
Landstatus.shp
(Private land) ownership Patented Claim boundaries

* Map produced by BLM Fillmore Field Office